

PHOTOGRAPHIC INTERPRETATION REPORT



KOSTROMA
ICBM COMPLEX
USSR

TCS-80507/67
SEPTEMBER 1967
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PREFACE

25X1D This report, prepared in response to CIA Requirements C-DI5-82,972 and C-DI7-84,251 requesting detailed line drawings, to scale, of elements of the complex, updates and supersedes TCS-80248/67, Kostroma ICBM Complex, USSR.
1/ The information contained herein is based on KEYHOLE photography through [REDACTED] Individual reports will be updated periodically to reflect changes observed on subsequent photography.

KOSTROMA ICBM COMPLEX, USSR

The Kostroma ICBM Complex (Figure 1) is deployed northeast of the city of Kostroma, capital of the Kostroma Oblast in the Russian SFSR. The city, situated on the high, east bank of the Volga river at the mouth of the Kostroma river, is an important industrial center about 165 nm northeast of Moskva. Founded in the 12th century on the low, west bank of the Volga, it was destroyed by Tatars and transferred to its present site in 1238 AD.

The complex support facility is in the industrial outskirts on the east side of the city. The rail-to-road transfer point is about 10 nm to the northeast. Completed launch sites deployed here include 4 Type IIB, 2 Type IID, and 1 Type IIIA. There are also 3 groups of Type IIID sites under construction, each group containing 10 sites. A possible launch site has been identified near the transfer point. The SS-7 sites and 2 of the Type IIID launch groups are deployed on both sides of the Kostroma-Buy highway northeast of Kostroma; the third group is southeast of Kostroma on the east bank of the Volga river. The furthest site is about 22 nm from the transfer point.

The city of Kostroma is at an elevation of about 500 feet. Terrain to the east and northeast is gently rolling, with a total difference in relative elevation of approximately 200 feet. Numerous small drains flow generally south to the Volga or west to the Kostroma. Much of the land is heavily forested, interspersed with cleared areas devoted to agriculture or cattle raising. Most of the region in and around the complex is, by Soviet standards, well populated for a rural region. Numerous small towns and villages are present along the roads.

The complex is in the center of the Forest Zone of the European USSR. It is about the same latitude as Juneau, Alaska. The characteristic weather is gloomy. Winters are cold, with frequent snowfall. Stable snow cover usually exists from mid-October to mid-April. Temperatures during the winter months of November through February range from -14° to -39° F. Summers are moderately warm, with light breezes, recurring cold spells, and frequent fogs. The average temperatures during the 4 warmest months vary between 45° and 68° F. Roughly twice as much precipitation falls in summer as in winter, and spring is drier than autumn. In general, precipitation falls every second or third day in all seasons of the year. Minimum cloudiness generally exists from May to August, when approximately two-thirds of the days are clear. Maximum cloudiness occurs from November through January, when approximately one-fourth of the days are clear. Weather in this region varies considerably from year to

year and sudden intrusions of Arctic air may cause drastic temperature drops at any time. Below-freezing temperatures may be experienced even in the summer months.

Transportation facilities into the complex are much better, relatively, than those found at most other ICBM complexes, especially those east of the Urals. A single-track rail line runs from Yaroslavl, through Kostroma, to Galich where it joins one of the main east-west rail lines. Yaroslavl is on a north-south rail line that runs direct to Moskva. Several industrial sidings serve the complex support facility, and 9.0 nm east of the complex support facility a rail spur branches from the Kostroma-Galich line and runs about 2.5 nm north to the transfer point. The road network connecting Kostroma with the surrounding towns and villages includes many all-weather roads which afford good motor transport routes between most of the large cities in European Russia. The existing highway from Kostroma to Buy was utilized as the complex main road, with access roads constructed to the various launch sites. As the first group of sites approached completion, the main highway was improved and, in many places, relocated in order to better handle the large missile trailers. The new route bypasses the towns and villages clustered along the old road.

Construction of the Kostroma ICBM Complex was probably initiated by [REDACTED] There was no evidence of it in [REDACTED] and it was first observed in [REDACTED] at which time the complex support facility and Launch Site 1 were both present. The size of the complex support facility and the number of buildings it contained indicated that work was started at least 6 to 7 months prior to the time it was first observed. Launch Site 1, a Type IIB site, appeared to be in an early stage and was probably started in the spring of [REDACTED] Construction of 2 other Type IIB sites was started during [REDACTED] and the 1 Type IIIA site was started either in late [REDACTED] Another Type IIB site was started in early [REDACTED] construction was started for 2 Type IID launch sites. A second Type IIIA launch site was started during [REDACTED] but was abandoned before it reached a mid-stage of construction. By [REDACTED] all construction work was complete and the only activity observed at this complex for the next 2 years was an occasional missile exercise or maintenance problem at one of the launch sites.

In the late winter and early spring of [REDACTED] construction activity was again observed and confirmed as deployment of 2 groups of Type IID launch sites. Construction of a third group of Type IID sites was started during the winter [REDACTED] and all 10 sites were under construction before the summer of [REDACTED]

The total number of Type IIID launch groups to be deployed at this complex cannot now be forecast. Recent photographic coverage of the complex support facility reveals large stockpiles of materials for site construction. This is consistent with the large number of launch sites currently under construction. There is still space for additional site deployment to the east and south-east. If the Soviets intend to continue site deployment, and follow their previously established construction practices, a fourth group of Type IIID launch sites should be initiated during the summer of [REDACTED]

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Component	Type	Graphic Coordinates
Complex Support Facility		57-46N 041-01E
Launch Site 1	IIB	58-01N 041-22E
Launch Site 2	IIB	58-02N 041-06E
Launch Site 3	IIB	57-58N 041-09E
Launch Site 4	IIB	58-05N 041-39E
Launch Site 5	IIIA	57-57N 041-13E
Launch Site 6	IID	57-55N 041-10E
Launch Site 7	IID	58-06N 041-32E
Launch Group I		
Launch Site 9I	IIID	57-53N 041-13E
Launch Site 10I	IIID	57-49N 041-10E
Launch Site 21I ^a	IIID	57-50N 041-16E
Launch Site 22I	IIID	57-53N 041-20E
Launch Site 23I	IIID	57-53N 041-08E
Launch Site 24I	IIID	57-46N 041-08E
Launch Site 26I	IIID	57-47N 041-14E
Launch Site 30I	IIID	57-49N 041-22E
Launch Site 31I	IIID	57-50N 041-29E
Launch Site 33I	IIID	57-47N 041-24E
Launch Group J		
Launch Site 12J ^a	IIID	58-06N 041-36E
Launch Site 13J	IIID	58-08N 041-38E
Launch Site 14J	IIID	58-07N 041-44E
Launch Site 15J	IIID	58-03N 041-40E
Launch Site 16J	IIID	58-09N 041-23E
Launch Site 17J	IIID	58-08N 041-30E
Launch Site 18J	IIID	58-06N 041-25E
Launch Site 19J	IIID	58-04N 041-28E
Launch Site 28J	IIID	58-01N 041-38E
Launch Site 32J	IIID	58-03N 041-33E
Launch Group K		
Launch Site 34K	IIID	57-44N 041-12E
Launch Site 35K	IIID	57-42N 041-05E
Launch Site 36K	IIID	57-41N 041-17E
Launch Site 37K	IIID	57-40N 041-02E
Launch Site 38K (Prob) ^a	IIID	57-39N 041-09E
Launch Site 39K (Prob)	IIID	57-37N 041-16E
Launch Site 40K (Prob)	IIID	57-36N 041-26E
Launch Site 41K (Prob)	IIID	57-35N 041-10E
Launch Site 42K (Prob)	IIID	57-32N 041-11E
Launch Site 43K (Prob)	IIID	57-32N 041-17E
Launch Site 44X (Poss)	IIID	57-51N 041-14E

^aControl Site

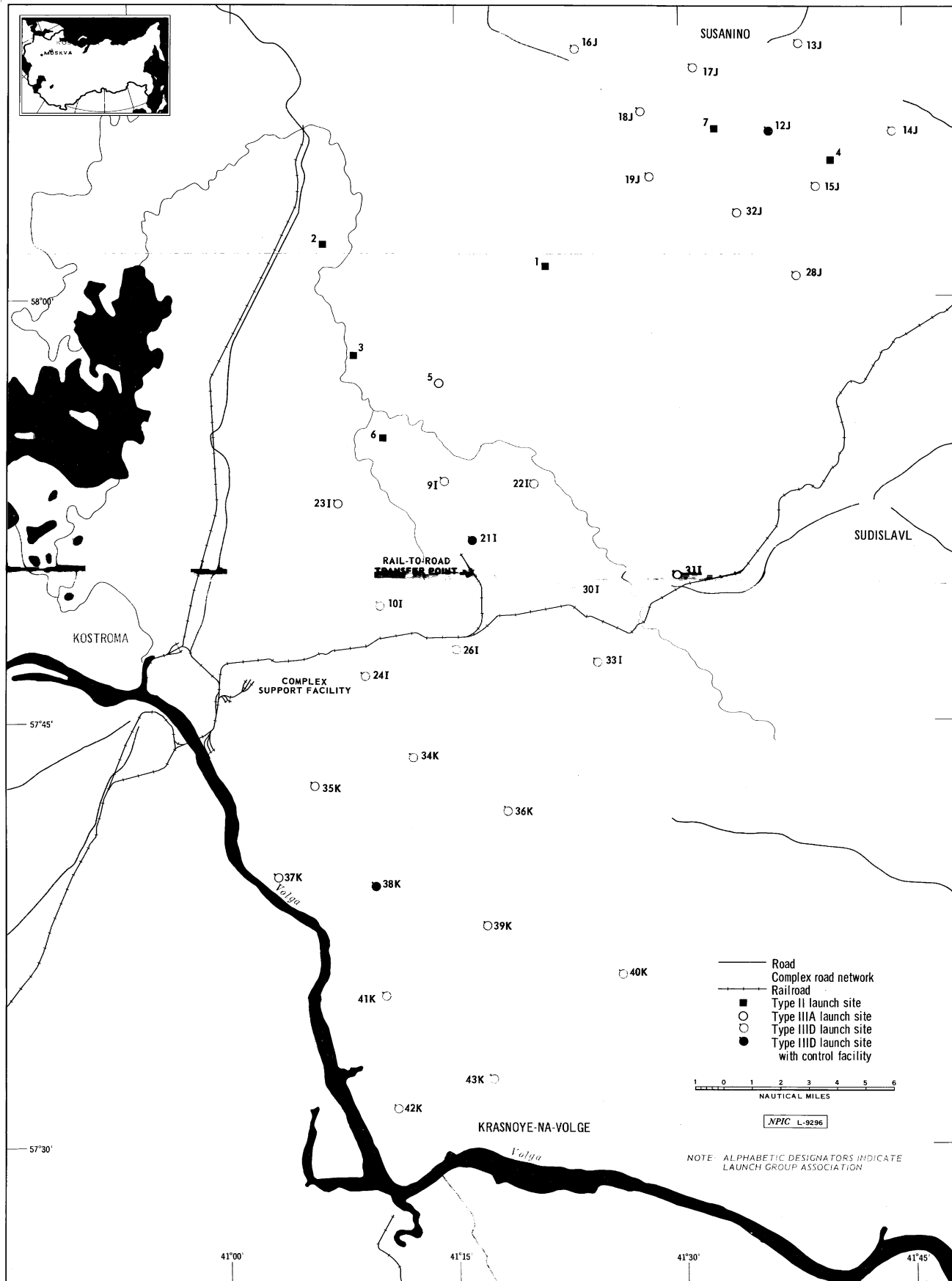


FIGURE 1. LOCATION OF KOSTROMA ICBM COMPLEX.

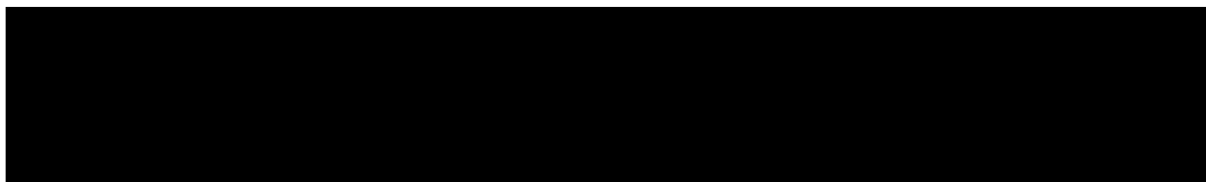
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REFERENCES



DOCUMENT

1. NPIC. TCS-80248/67, *Kostroma ICBM Complex, USSR*, Apr 67 (TOP SECRET RUFF)

REQUIREMENTS

CIA. C-DI5-82,972
CIA. C-DI7-84,251

NPIC PROJECT

11210/66 (partial answer)

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